Claims

1. A transducer, comprising a one-piece or multi-piece piezoceramic disk and a membrane formed of a material which attenuates sound vibrations.

2. The transducer according to claim 1, in which the membrane is formed of a soft material.

3. The transducer according to claim 1, in which the membrane is formed of synthetic material.

4. The transducer according to claim 1, in which the membrane comprises a polymer.

5. The transducer according to claim 1, in which the membrane comprises an elastomer.

6. The transducer according to claim 1, in which the membrane comprises a polypropylene.

7. The transducer according to claim 1, in which the membrane comprises a composite material.

8. The transducer according to claim 1, in which the piezoceramic disk is glued onto the membrane by means of a hard glue.

9. The transducer according to claim 1, in which a layer of metal is provided on the membrane.

10. The transducer according to claim 1, in which the membrane is provided with one or more circumferential grooves.

11. The transducer according to claim 10, in which the membrane has two sides opposite to each other and the ceramic disk is attached to one side while the groove or grooves are provided in the other side.

12. The transducer according to claim 10, in which the groove or grooves have a depth of 90% of the thickness of the membrane.

13. The transducer according to claim 10, in which the groove or grooves extend over the entire thickness of the membrane, and the thus formed membrane parts are mutually connected by means of adhesive tape or such.

14. The transducer according to claim 1, in which the membrane has a circumferential edge, the transducer being connected at the circumferential edge of the membrane to a frame, a housing of a device or similar by means of a flexible glue.

15. The transducer according to claim 1, which is formed by the housing of a device made of synthetic material, onto which the piezoceramic disk is attached.

16. The transducer according to claim 15, in which an opening. is provided in the wall of the housing, at the location of the piezoceramic disk.

17. The transducer according to claim 13, including a suspension frame formed of a material which attenuates sound vibrations.

18. - The transducer according to claim 17, in which the suspension frame has an L-shaped cross-section.

19. The transducer according to claim 18, in which the suspension frame has a U-shaped cross-section.

20. The transducer according to claim 1, wherein a frequency filter, formed by a plate with round openings therein, is provided in front of the transducer.